CLAIMS

What is claimed is:

1.   For a system including a device for setting a material placed on a textile or graphic, a programmable logic controller for controlling the system and being operably connected to the device, the programmable logic controller comprising:

a power intensity selector;

an application module being capable of generating a power intensity output signal, the power intensity output signal being responsive to the power intensity selector; and,

a time cycle selector providing a range of time duration for applying the power intensity output signal to the device.

2.   The programmable logic controller of Claim 1 wherein the application module further comprising:

a calculation interval; and,

a base resolution amount, wherein the power intensity output signal being determined by the base resolution amount in cooperation with a selected power intensity, the selected power intensity being selected by a user.

3.   The programmable logic controller of Claim 2 wherein the calculation interval being based on a frequency of an incoming AC power signal operably connected to the programmable controller.

4.   The programmable logic controller of Claim 3 wherein the frequency of the incoming AC power signal is equal to or greater than 50 Hz.

5.   The programmable logic controller of Claim 2 wherein the base resolution amount is 100.

6.   The programmable logic controller of Claim 1 further comprising:

an operating parameter threshold level associated with the device; and,

an input module for sensing an operating parameter emitted from the device, the device being responsive to a comparison of the sensed operating parameter and the operating parameter threshold level wherein the device is turned off when the sensed

5   operating parameter exceeds the operating parameter threshold level.

7.   The programmable logic controller of Claim 6 further comprising:

an interrupt signal being generated in response to the sensed operating parameter exceeding the operating parameter threshold level, wherein the interrupt signal being

10   transmitted to the application module for turning off the device.

8.   A programmable logic controller for a system including a device for setting a material placed on a textile or graphic, the programmable logic controller comprising:

a power intensity capable of being selected by a user;

15   an application module capable of generating a power intensity output signal, the application module further comprising:

a calculation interval; and,

a base resolution amount wherein the power intensity output signal being determined in response to the selected power intensity, the base resolution amount, and the

20   calculation interval; and,

a time cycle selector providing a range of time duration for applying the power intensity output signal to the device.

9.   The system of Claim 8 further comprising:

25   a plurality of lamps.

10.   The system of Claim 8 further comprising:

a plurality of infrared radiant panels.

30   11.   The programmable logic controller of Claim 9 further comprising:

a lamp selector, wherein a portion of the plurality of lamps to be utilized to set the material being determined in response to the lamp selector.

12. The programmable logic controller of Claim 8 wherein the calculation interval being
5 based on a frequency of an incoming AC power signal operably connected to the programmable controller.

13. The programmable logic controller of Claim 12 wherein the frequency of the incoming AC power signal is equal to or greater than 50 Hz.
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14. The programmable logic controller of Claim 8 wherein the base resolution amount is 100.

15. The programmable logic controller of Claim 8 further comprising:
15 an operating parameter threshold level associated with the device; and,
an input module for sensing an operating parameter emitted from the device, the device being responsive to a comparison of the sensed operating parameter and the operating parameter threshold level wherein the device is turned off when the sensed operating parameter exceeds the operating parameter threshold level.
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16. The programmable logic controller of Claim 15 further comprising:
an interrupt signal being generated in response to the sensed operating parameter exceeding the operating parameter threshold level, wherein the interrupt signal being transmitted to the application module for turning off the device.
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17. For a system including a programmable logic controller for controlling a device utilized in setting a material placed on a textile or graphic, a method comprising the steps of:
receiving a power intensity value to be supplied to the device;
30 receiving a time cycle duration for applying the power intensity value to the device;

generating a power intensity output signal in response to the received power
intensity; and,

transmitting the generated power intensity output signal to the device.

5   18.   The method of Claim 17 further comprising the steps of:

receiving a calculation interval signal;

initiating determination of the power intensity output signal in response to receiving
the calculation interval signal; and,

utilizing a base resolution amount in cooperation with the received power intensity

10   value to generate the power intensity output signal.

19.   The method of Claim 17 further comprising the steps of:

receiving an operating parameter threshold level;

sensing an operating parameter emitted from the device; and,

15   turning off the device in response to the sensed operating parameter exceeding the
received operating parameter threshold level.

20.   The method of Claim 17 further comprising the steps of:

providing a plurality of lamps;

20   providing a lamp selector switch having a plurality of positions; and,
utilizing a portion of the plurality of lamps in response to one of the plurality of positions of
the lamp selection switch.